

Year	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100
Population	1,000,000	1,050,000	1,100,000	1,150,000	1,200,000	1,250,000	1,300,000	1,350,000	1,400,000	1,450,000	1,500,000	1,550,000	1,600,000	1,650,000	1,700,000	1,750,000	1,800,000	1,850,000	1,900,000	1,950,000	2,000,000	2,050,000	2,100,000	2,150,000	2,200,000	2,250,000	2,300,000	2,350,000	2,400,000	2,450,000	2,500,000	2,550,000	2,600,000	2,650,000	2,700,000	2,750,000	2,800,000	2,850,000	2,900,000	2,950,000	3,000,000	3,050,000	3,100,000	3,150,000	3,200,000	3,250,000	3,300,000	3,350,000	3,400,000	3,450,000	3,500,000	3,550,000	3,600,000	3,650,000	3,700,000	3,750,000	3,800,000	3,850,000	3,900,000	3,950,000	4,000,000	4,050,000	4,100,000	4,150,000	4,200,000	4,250,000	4,300,000	4,350,000	4,400,000	4,450,000	4,500,000	4,550,000	4,600,000	4,650,000	4,700,000	4,750,000	4,800,000	4,850,000	4,900,000	4,950,000	5,000,000	5,050,000	5,100,000	5,150,000	5,200,000	5,250,000	5,300,000	5,350,000	5,400,000	5,450,000	5,500,000	5,550,000	5,600,000	5,650,000	5,700,000	5,750,000	5,800,000	5,850,000	5,900,000	5,950,000	6,000,000	6,050,000	6,100,000	6,150,000	6,200,000	6,250,000	6,300,000	6,350,000	6,400,000	6,450,000	6,500,000	6,550,000	6,600,000	6,650,000	6,700,000	6,750,000	6,800,000	6,850,000	6,900,000	6,950,000	7,000,000	7,050,000	7,100,000	7,150,000	7,200,000	7,250,000	7,300,000	7,350,000	7,400,000	7,450,000	7,500,000	7,550,000	7,600,000	7,650,000	7,700,000	7,750,000	7,80																																																																

1. A medium for retention of chemical species for use in a hand-held device for the relatively rapid detection of the presence of an analyte of interest in a sample, wherein the medium is comprised of a porous, absorbent polymeric material.
2. The medium of claim 1, wherein the polymeric material has a density of from about 0.05 g/cc to about 0.1 g/cc, an average pore size of from about 0.2 mm to about 1mm, a pore size range of from about 0.004 to about 1.2 mm, and an absorptive capacity of from about 5 g water/g of polymeric material to about 15 g water/g of polymeric material.
3. The medium of claim 1, wherein the polymeric material is selected from the group consisting of polyvinyl alcohol and polyvinyl acetal.
4. The medium of claim 1, wherein the medium functions as a swab for the sampling of the analyte of interest on a solid surface.
5. The medium of claim 3, wherein the polymeric material has a density of approximately 0.1 g/cc, an average pore size of 0.2 mm, a pore size range of about 0.004 to about 0.4 mm, and an absorptive capacity of about 7 to about 10 g water/g of polymeric material.
6. The medium of claim 3, wherein the medium is in a cylindrical shape.
7. The swab of claim 6, wherein the height of the cylindrical swab is less than the diameter of the swab.
8. The medium of claim 3, wherein at least a portion of a surface of the medium is covered with an effective amount of an adhesive substance.

9. The medium of claim 1, wherein the medium functions as a reagent disc for loading of a reactant system.

10. The medium of claim 9, wherein the polymeric material has a density of about 0.05 g/cc; an average pore size of from 0.9 to 1 mm; a pore size range of about 0.2 mm to about 1.2 mm; and an absorptive capacity of approximately 15 g of water/g of polymeric material.

11. The medium of claim 9, wherein the reactant system is loaded onto the reactant disc by contacting a solution of the reactant system in an appropriate solvent onto the polymeric material of which the disc is comprised and removing the solvent from the polymeric material.

12. The medium of claim 11, wherein the solvent is removed from the polymeric material by a method selected from the group consisting of evaporation, sublimation, freeze-drying or lyophilization.

13. The medium of claim 9, wherein the reactant system is capable of undergoing a reaction with adenosine triphosphate (ATP) to generate chemiluminescence as a product of the reaction.

14. The medium of claim 9, wherein the reactant system comprises a luciferase/luciferin system.

15. The medium of claim 14, wherein the reactant system further comprises trehalose in an amount effective to increase the luminescence emission by a factor of from about 25 to about 100%.

16. The medium of claim 14, wherein the reactant system comprises trehalose in an amount effective to increase the luminescence emission by more than 100%.